

TIC-505

253

Printed Pages : 3

Paper Code & Roll No. to be filled in your Answer Book

Roll No.

Odd Semester Examination-2016

B.Tech (Semester-V)

**TRANSDUCERS, SENSORS AND DISPLAY
DEVICES**

[Time : 3 Hours]

[Maximum Marks :100]

Note : Attempt **all** questions. All questions carry **equal** marks.

1. Attempt **any four** questions : [5x4=20]

- (a) What is an error, discuss about errors in measurements in brief.
- (b) Brief introduction about Piezoelectric Sensor.
- (c) Write down about dual trace.
- (d) Discuss Guarding techniques in brief.
- (e) Write down about Sweep frequency generator.
- (f) What is Data Loggers, discuss in brief.

2. Attempt **any four** questions : [5x4=20]

(a) Explain Magnetic disk and tape in brief.

(b) Write down about digital plotters.

(c) Discuss about accuracy in DVM.

(d) What is calibration, discuss in brief.

(e) Explain Pulse generator.

(f) What is wave analyzer?

3. Attempt **any two** questions : [10x2=20]

(a) What is oscilloscope, explain sampling oscilloscope with diagram.

(b) Discuss optical sensors and acoustic sensors in detail.

(c) What is audio frequency signal, also discuss AF generator with diagram in detail.

4. Attempt **any two** questions : [10x2=20]

(a) Show the comparative study between Digital Voltmeters and Multimeters in detail.

- (b) What is transducer, discuss classification of transducers, in detail.
- (c) Write down about spectrum analyzer and logic analyzer.

5. Attempt **any two** questions : [10x2=20]

- (a) Explain Flow Sensors and Radiation Sensors in detail.
- (b) Discuss about Strain Gauges with an appropriate example in detail.
- (c) Write down short notes on :
 - (i) CRO
 - (ii) LED

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